

Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) Spray-drying device (1), comprising a vertical drying chamber (2) which comprises:

- a tubular material feed (3) which supplies material which is spray-dried,
- an atomization means (4) on the free end of the tubular material feed which atomizes the material which is to be spray-dried,
- a tubular drying-gas feed (6) which supplies drying gas,

wherein an outlet end of the tubular material feed (3) is partially coaxially located within an outlet end of the tubular drying-gas feed (6) at a point where both the outlet end of the tubular material feed and the tubular drying-gas feed are coaxially located on the longitudinal axis at a top of the drying chamber;

wherein an outlet opening of the atomization means is provided below an outlet opening of the tubular drying-gas feed to facilitate the atomization of the material;

- a drying-gas discharge (8) at a bottom end of the drying chamber that discharges drying gas,

- a material discharge (9) at the bottom end of the drying chamber that discharges spray-dried material,
- filter means (11) enclosed around a periphery of the drying chamber that separate only entrained fine particles out of discharged drying gas,
- fine-particle removal means (12) that removes fine particles which have been deposited on the filter means (11), and a fine-particle collection means (10) for collecting the fine particles which have been removed from the filter means (11) by the fine-particle removal means (12), the collected fine particles and the spray-dried material being separate products which are separately discharged.

2. (Previously Presented) Spray-drying device according to claim 1, wherein the fine-particle collection means comprises at least one separate compartment of the drying chamber, the filter means and the fine-particle removal means being arranged in the at least one compartment, and the drying-gas discharge being in open communication with the drying chamber via the at least one compartment.

3. (Previously Presented) Spray-drying device according to claim 2, wherein the at least one compartment is in direct communication with the drying chamber by at least one opening in a wall thereof.

4. (Previously Presented) Spray-drying device according to claim 3, wherein the at least one compartment is in communication with the drying chamber by means of a group of at least two openings in a wall thereof, which openings are distributed evenly over the periphery of the drying chamber.

5. (Previously Presented) Spray-drying device according to claim 4, wherein the at least one compartment is in communication with the drying chamber by means of at least two groups of openings arranged at different heights in the drying chamber.

6. (Previously Presented) Spray-drying device according to claim 1, wherein the filter means comprise one of a bag filter and a filter hose.

7. (Previously Presented) Spray-drying device according to claim 1, wherein the fine-particle removal means comprises means for reversing the flow of drying gas.

8. (Previously Presented) Spray-drying device according to claim 1, wherein the fine-particle collection means also comprises fine-particle treatment means.

9. (Previously Presented) Spray-drying device according to claim 1, wherein the fine-particle collection means also comprises fine-particle conveyor means.

10. (Previously Presented) Spray-drying device according to claim 9, wherein the fine-particle conveyor means comprise a perforated plate through which gas can be blown.

11. (Previously Presented) Spray-drying device according to claim 9, wherein the fine-particle conveyor means comprise a discharge opening leading to the drying chamber.

12. (Previously Presented) Spray-drying device according to claim 1, wherein the diameter of the outlet opening of the tubular drying-gas feed is larger than that of the atomization means.

13. (New) Spray-drying device (1), comprising a vertically extending drying chamber (2) which comprises:

- a material feed (3) for supplying material which is to be spray-dried,
- an atomization means (4) for atomizing material which is to be spray-dried,
- a drying-gas feed (6) for supplying drying gas,
- a drying-gas discharge (8) for discharging drying gas,
- a material discharge (9) for discharging spray-dried material,

- filter means (11) for separating only entrained fine particles out of discharged drying gas, and

- fine-particle removal means (12) for removing fine particles which have been deposited on the filter means (11) from the filter means (11), wherein the spray-drying device also comprises fine-particle collection compartment (10) for collecting the fine particles which have been removed from the filter means (11) by the fine-particle removal means (12), the collected fine particles and the spray-dried material being separate products which are separately discharged.

14. (New) Spray-drying device (1), comprising a vertically extending drying chamber (2) which comprises:

- a material feed (3) for supplying material which is to be spray-dried,

- an atomization means (4) for atomizing material which is to be spray-dried,

- a drying-gas feed (6) for supplying drying gas,

- a drying-gas discharge (8) for discharging drying gas,

- a material discharge (9) for discharging spray-dried material,

- filter means (11) for separating only entrained fine particles out of discharged drying gas, and
- fine-particle removal means (12) for removing fine particles which have been deposited on the filter means (11) from the filter means (11), wherein the spray-drying device also comprises a filter chamber (10) for collecting the fine particles which have been removed from the filter means (11) by the fine-particle removal means (12), the collected fine particles and the spray-dried material being separate products which are separately discharged.